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Indian Standard

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पैकेजिंग — शब्दावली

Packaging — Vocabulary

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Transport Packages, Packaging Codes, Freight Containers and Pallets Sectional Committee, TED 24

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Transport Packages, Packaging Codes, Freight Containers and Pallets Sectional Committee had been approved by the Transport Engineering Division Council.

In the formulation of this standard, considerable assistance has been derived from the ISO 21067 : 2007 'Packaging — Vocabulary' issued by the International Organization for Standardization (ISO).

Packaging is a comprehensive subject, few other relevant standards are listed below:

IS No./ Other Publication	*Title*
IS 1394	Glossary of terms relating to metal containers
IS 2244	Glossary of terms relating to treated fabrics (*first revision*)
IS 2828	Plastics vocabulary
IS 3971	Pallets for materials Handling — Vocabulary
IS 4261	Glossary of terms relating to paper and Pulp based packaging materials
IS 7019	Glossary of terms in plastics and flexible packaging, excluding paper
IS 7186	Glossary of terms relating to paper and flexible packaging
ISO 21067	Packaging — Vocabulary

Indian Standard

PACKAGING — VOCABULARY

1 SCOPE

1.1 This Indian Standard specifies preferred terms and definitions related to packaging and materials handling.

1.2 For packaging designed for the transport of dangerous goods, terms and definitions are given in the United Nations recommendations on the transport of dangerous goods.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	*Title*
IS 6569 : 2004/ ISO 830 : 1999	Freight containers — Vocabulary
IS 14738 : 2017	Flexible intermediate bulk containers (FIBCs) — Specification
IS 15875 : 2009/ ISO 15867 : 2003	Intermediated bulk containers (IBCs) for non-dangerous goods — Terminology

3 TERMINOLOGY

For the purpose of this standard, the following terms and definitions shall apply.

3.1 Basic Terms

3.1.1 *Packaging* — (Product) Any product to be used for the containment, protection, handling, delivery, storage, transport and presentation of goods, from raw materials to processed goods, from the producer to the user or consumer, including processor, assembler or other intermediary.

3.1.2 *Packaging* — (Operation) Operations involved in the preparation of goods for containment, protection, handling, delivery, storage, transport and presentation of goods, from raw materials to processed goods, from the producer to the user or consumer

NOTE — The term includes preservation, packing, marking and unitization.

3.1.3 *Pack, Package (noun)* — Packaging (*see* **3.1.1**) and its contents.

3.1.4 *Pack, Package (verb)* — Create a package (*see* **3.1.3**).

3.2 General Terms

3.2.1 *Container Shipping Container* — (For transport) article of transport equipment strong enough to be suitable for repeated use and specially designed to facilitate the carriage of goods by one or more means of transport without breakage of load.

NOTES

1 The phrase “without breakage of load” means that the container is handled as a single unit during transit.

2 The term “container” is often used as a non-specific term for a receptacle (*see* **3.2.15**).

3.2.2 *Primary Packaging* — Packaging (*see* **3.1.1**) designed to come into direct contact with the product.

3.2.3 *Secondary Packaging* — Packaging (*see* **3.1.1**) designed to contain one or more primary packaging together with any protective materials where required.

3.2.4 *Distribution Packaging Transport Packaging* — Packaging (*see* **3.1.1**) designed to contain one or more articles or packages, or bulk material, for the purposes of transport, handling and/or distribution.

3.2.5 *Consumer Packaging Retail Packaging Sales Packaging* — Packaging (*see* **3.1.1**) constituting, with its contents, a sales unit for the final user or consumer at the point of retail.

3.2.6 *Industrial Packaging* — Packaging (*see* **3.1.1**) for raw materials, components and partially manufactured or finished goods, for distribution from manufacturer to manufacturer and/or other intermediaries such as processor or assembler.

3.2.7 *Bulk Packaging* — Packaging intended to contain loose articles, large masses of solids or granular materials, or liquids for transport or storage.

3.2.8 *Child-Resistant Package* — Package which is difficult for young children to open (or gain access to the contents), but which is possible for adults to use properly.

3.2.9 *Base Pack Unit Pack* — Smallest pack (*see* **3.1.3**) with identical or different products that are to be supplied at the same time.

3.2.10 *Commercial Package* — Packaging (*see* **3.1.1**), which, as far as quantity of content, type, quality or design of the package are concerned, conforms to the requirements of the respective level of trading.

3.2.11 *Consolidated Pack* — More than one package grouped together to facilitate handling operations.

3.2.12 *Containerization* — Shipping method in which goods are loaded together in one container (**3.2.1**).

3.2.13 *Overpack* — Enclosure generally used by a single consignor to contain one or more packages consolidated into a single unit to facilitate easy handling and stowage during transport.

NOTE — In English, the same term is also used to describe the use of excessive packaging.

3.2.14 *Packaging Chain* — Sector of the overall economy involving all economic operators concerned with the packaging and/or distribution of goods.

3.2.15 *Container* — (For packaging) Non-specific receptacle capable of closure (*see* **3.2.1).**

3.2.16 *Flexible Packaging* — Packaging whose shape is likely to change after the contents are added or removed.

3.2.17 *Rigid Packaging* — Packaging whose shape remains essentially unchanged after the contents are added or removed.

3.3 Types of Packaging (Product)

3.3.1 *Bag* — Flexible packaging of single or multiple layers or plies, generally enclosed on all sides except one, forming an opening that may or may not be sealed after filling.

3.3.2 *Sack* — Bag (*see* **3.3.1**).

NOTE — "Bag" is also defined in some International Standards as "sack".

3.3.3 *Bale* — Shaped unit of compressed articles or materials bound with cord, strapping or metal ties under tension.

NOTE — It may also be wrapped.

3.3.4 *Barrel* — Packaging of circular cross-section, with greater length than breadth, with convex sides and two flat ends of equal diameter.

NOTE — A barrel is normally made of wooden staves bound together with hoops.

3.3.5 *Bottle* — Rigid packaging, typically of glass or plastic, having a comparatively narrow neck or mouth, with a closure and usually no handle.

3.3.6 *Jar* — Small rigid packaging of glass, plastic or earthenware, with a wide mouth.

3.3.7 *Box* — Rigid packaging with rectangular or polygonal sides, usually completely enclosing the contents.

NOTE — The sides may contain apertures for handling or ventilation.

3.3.8 *Carton* — Folding collapsible packaging generally made from boxboard

NOTE — Although this term is in general use in English, it might not have an equivalent term in other languages.

3.3.9 *Case* — Non-specific term for transport packaging, often used to refer to a box.

3.3.10 *Crate* — Transport packaging with incomplete surfaces.

3.3.11 *Wirebound Box* — Box whose parts are reinforced and connected to each other by means of tempered wires.

NOTE — This type of box is usually closed for shipment by twisting of the wire ends or by connecting pre-fabricated loops.

3.3.12 *Bundle* — Number of articles bound with materials under tension, which also may be wrapped.

3.3.13 *Can* — Small primary packaging, usually cylindrical and usually made of metal.

3.3.14 *Drum* — Cylindrical packaging whose bottom end is permanently fixed to the body and top end (head) is either removable or non-removable.

NOTE — Barrels are not classified as drums.

3.3.15 *Non-removable-head/Drum Tight-head Drum* — Cylindrical packaging whose ends are permanently fixed to the body, with openings for filling, emptying and venting in the top end (head).

NOTE — This definition is not applicable to drums used for the transport of dangerous goods.

3.3.16 *Removable-head/Drum Open-head Drum* — Drum whose bottom end is permanently fixed to the body and whose top end can be removed as a lid (head).

NOTES

1 The top may have additional openings.

2 This definition is not applicable to drums used for the transport of dangerous goods.

3.3.17 *Pail* — Packaging of circular cross-section, tapered and equipped with a lid and usually a handle.

NOTE — This definition is not applicable to pails used for the transport of dangerous goods.

3.3.18 *Unit Load, Unitized Load* — Single item or assembly of items designed to enable these to be handled as a single entity.

3.3.19 *Jerrican* — Metal or plastics primary packaging of rectangular or polygonal cross-section for liquids.

NOTE — An aperture on the top or side of the body and a carrying device is usual.

3.3.20 *Intermediate Bulk Container (IBC)* — Primary packaging designed to:

a) have a capacity of 3 m^3 (3 000 l) or less;

b) be handled mechanically with or without integral or detachable devices;

c) contain liquids, pastes or solids (for instance powders or granules); and

d) be resistant to the stresses imparted during handling and transport as determined by test (IS 15875).

NOTES

1 This definition is not applicable to IBCs used for the transport of dangerous goods.

2 Definitions of types of IBCs and related terms can be found in IS 15875.

3.3.21 *Flexible Intermediate Bulk Container (FIBC)* — An intermediated bulk container having the body made of a flexible material such as woven fabric, plastics film or paper, designed to be in contact with the contents either directly or through an inner liner and easily foldable when empty.

NOTE — Refer IS 14738, for further terms used in relation to FIBC.

3.3.22 *Collapsible Tube* — Flexible packaging having a nozzle and cap at one end and closed at the other, serving as both container and dispenser.

3.4 Packaging Material

3.4.1 *Paper* — Material in the form of a coherent sheet or web, excluding sheets or laps of pulp as commonly understood for paper-making or dissolving purposes and non-woven products, made by deposition of vegetable, mineral, animal or synthetic fibres, or their mixtures, from a fluid suspension onto a suitable forming device, with or without the addition of other substances.

NOTES

1 Paper may be coated, impregnated or otherwise converted, during or after its manufacture, without necessarily losing its identity as paper. In conventional paper-making processes, the fluid medium is water, new developments, however, include the use of air and other fluids.

2 In the generic sense, the term “paper” may be used to describe both paper and board as defined in this Standard. The primary distinction between paper and board is normally based upon thickness or grammage, although in some instances the distinction is based on the characteristics and/or end-use. For example, some materials of lower grammage (such as certain grades of folding boxboard and corrugating raw materials) are generally referred to as “board”, while other materials of higher grammage (such as certain grades of blotting paper, felt paper and drawing paper) are generally referred to as “paper”.

3.4.1.1 *Board/Paperboard* — Certain types of paper frequently characterized by their relatively high rigidity.

NOTE — *See* NOTE 2 to **A.1.1**.

3.4.1.2 *Boxboard/Folding Boxboard* — Grades of paperboard having good scoring and folding properties, used for fabrication of folding and set-up boxes (cartons).

NOTE — It is customarily shipped in sheets.

3.4.1.3 *Containerboard* — Paperboard made specifically for the manufacture of corrugated and solid fibreboard packaging.

NOTES

1 Basic/ weight is expressed in grams per square metre..

2 It is customarily shipped in rolls.

3.4.1.4 *Corrugated/Fibreboard* — Board consisting of one or more sheets of fluted paper, glued to a flat sheet of board or between several sheets.

3.4.1.5 *Solid Fibreboard* — Board made from one sheet or several sheets pasted together, often incorporating a lining of kraft or other strong furnish, intended for the manufacture of packing cases and drums.

NOTE — Solid fibreboard generally has a grammage above 600 g/m^2

3.4.2 *Plastics* — Polymeric material, which may be formed into flexible film or rigid packaging.

3.4.3 *Tin Plate/Tinplate* — Cold-rolled low-carbon mild sheet steel or coil, coated on both surfaces with tin that is applied in continuous electrolytic operation.

3.4.4 *Tin Mill Black Plate* — Un-treated, low-carbon cold-reduced steel plate, for use only with non-corrosive non-food products in cans with bonded seams.

3.4.5 *Electrolytic Chromium/Chromium Oxide Coated Steel (ECCS) Tin-Free Steel* — Cold-rolled low-carbon mild steel or coil, electrolytically treated to produce on both surfaces a duplex film of metallic chromium adjacent to the steel substrate with a top layer of hydrated chromium oxides or hydroxides.

3.4.6 *Absorbent Packaging Material* — Material included within a package to soak up liquids resulting from leakage, seepage or liquefaction of the contents.

3.4.7 *Barrier Material* — Material that retards or prevents transmission or permeation of gases or passage of solids, liquids, gases or radiated energy.

3.4.8 *Cushioning Material* — Material used to isolate or reduce the effect of externally applied shock and/or vibration forces.

3.4.9 *Shrink Wrap /Shrink Film* — Plastics material that shrinks in size when heated to conform to the item(s) packaged.

3.4.10 *Stretch Wrap* — Material that elongates when applied under tension and which, through elastic recovery, conforms to the item(s) packaged.

3.5 Auxiliary Terms in Use with Packaging

3.5.1 *Closure* — Means of closing packaging to retain its contents.

3.5.2 *Preservation* — Application of protective measures, such as cleaning, drying, the use of preservatives and barrier materials, to prevent deterioration.

3.5.3 *Staple Stitch* — U-shaped round or flat wire fastener, which may or may not be clinched, for closing packaging or holding package components together.

3.5.4 *Strapping* — Strip of material, generally of flat or circular cross-section, used to secure packaging or articles within a container, to hold together a bundle or bale, to reinforce a packaging, or to secure packaging or articles to a pallet.

3.5.5 *Tape* — Strip of flexible material with one or more adhesive faces.

3.5.6 *Pallet* — Rigid horizontal platform of minimum height, compatible with handling by pallet trucks, and/or forklift trucks and other appropriate handling equipment, used as a base for assembling, stacking, storing, handling or transporting goods and loads.

3.5.7 *Label* — Piece of paper or other material displaying information and affixed to the packaging or article.

NOTE — This definition does not apply to labels for the transport of dangerous goods.

3.5.8 *Tag* — Label (*see* **3.5.7**) attached to the packaging or article by means of a tie or other suitable means.

3.5.9 *Adhesive* — Substance capable of holding materials together by surface attachment.

3.5.10 *Fastener* — Device that serves to secure one part to another.

3.5.11 *Sealing* — Method of bonding mating surfaces.

3.5.12 *Heat Sealing* — Method of bonding mating surfaces under controlled application of heat, pressure and dwell time.

3.5.13 *Pressure Sealing Cold Sealing* — Sealing under controlled application of pressure and dwell time.

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